

70506-305

11/6/2013

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U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

EP Reg. Number: 70506-305  
Date of Issuance: NOV 6 2013

Term of Issuance:  
Unconditional

Name of Pesticide Product:

Bifenture® 17 Insecticide

NOTICE OF PESTICIDE:

Registration  
 Reregistration

(Under FIFRA as amended)

Name and Address of Registrant (include ZIP Code):

United Phosphorus, Inc.  
630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406

Note: Changes in labels and claims in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is **unconditionally** registered in accordance with FIFRA sec. 3(c)(5). Once a pesticide is registered, however, it is not regarded as permanently acceptable. Registration does not eliminate the need for continual reassessment of pesticides. If the Agency determines that, at any time, additional data are required to maintain in effect an existing registration, the Agency will require submission of such data under FIFRA section (3).

1. You will make the following label changes before you release the product for shipment:
2. Submit within one of the date of this notice the results of one year storage stability and corrosion characteristics studies with observations made at 0, 3, 6, 9, and 12 months intervals.
3. Per 40 CFR 156.10(a)(6), submit one copy of your final printed labeling before releasing the product for shipment. As defined in 40 CFR 152.3, "final printed labeling" means the "label or labeling of the product when distributed or sold". Clearly legible reproductions or photo reductions will be accepted for unusual labels. Note that a clean copy of the master label in most cases does not meet the definition of final printed labeling. If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing amended labeling constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records.

If you have any questions regarding this action, please contact BeWanda Alexander at [www.alexander.bewanda@epa.gov](mailto:www.alexander.bewanda@epa.gov) or (703) 305-7460.

Signature of Approving Official:  
*BeWanda Alexander*  
Richard Gebken Product Manager  
Insecticide Branch/Registration Division (7505P)

Date:  
November 6, 2013

Enclosure

**ACCEPTED**  
 NOV 6 2013  
 Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 70506-305  
 For retail sale in

Bifenture 17 Insecticide  
 EPA followup  
 November 6, 2013  
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**RESTRICTED USE PESTICIDE**  
 Toxic to fish and aquatic organisms.  
 and use only by certified applicators, or persons under their direct supervision and only for the uses covered by the certified applicator's certification.

Group **3A** Insecticide

**Bifenture® 17 Insecticide**

<b>ACTIVE INGREDIENT:</b>		<b>BY WT.</b>
Bifenthrin (2 methyl [1,1-biphenyl] 3-yl), methyl 3 (2-chloro, 3,3,3-trifluoro-1-propenyl) 2,2-dimethyl, cyclopropanecarboxylate: .....		17.15%
<b>OTHER INGREDIENTS:**</b> .....		82.85%
		100.0%

\*\*Cis isomers 97% minimum, trans isomers 3% maximum.  
 This product contains 1.5 lbs. ai per gallon.

**KEEP OUT OF REACH OF CHILDREN**  
**CAUTION**

FIRST AID	
<b>IF SWALLOWED</b>	<ul style="list-style-type: none"> <li>• Call poison control center or doctor immediately for treatment advice.</li> <li>• Do not give any liquid to the person.</li> <li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li> <li>• Do not give anything by mouth to an unconscious person.</li> </ul>
<b>IF IN EYES</b>	<ul style="list-style-type: none"> <li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li> <li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li> <li>• Call a poison control center or doctor for treatment advice.</li> </ul>
<b>IF ON SKIN OR CLOTHING</b>	<ul style="list-style-type: none"> <li>• Take off contaminated clothing.</li> <li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li> <li>• Call a poison control center for treatment advise.</li> </ul>
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For medical emergency, call the Rocky Mountain Poison Control Center at 1-866-673-6671.	
NOTE TO PHYSICIAN	
This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.	
For chemical emergency: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300	

NET CONTENTS: \_\_\_\_\_ gallons

United Phosphorus, Inc.  
 630 Freedom Business Center, Suite 402  
 King of Prussia, PA 19406  
 1-800-438-6071

EPA Reg. No. 70506-~~011~~ 305  
 EPA Est. No. \_\_\_\_\_

Bifenture 17 may be comparable to another product used previously, however it is essential to read, and follow all label directions for use as there may be some differences. It is the responsibility of the user to ensure this product is labeled for use on the specific crop and geographical location in which it is intended. It is the responsibility of the user to follow all precautions and restrictions according to local and State authorities and is approved for sale. The user should read the Condition of Sale and Limitation of Warranty and Liability before purchasing this product.

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**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans and Domestic Animals**  
**CAUTION**

Harmful if swallowed. Harmful if absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Wear (specify any appropriate protective clothing, if appropriate).

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**

Applicators and other handlers (other than mixers and loaders) must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks

Mixers and Loaders must wear:

- Long-sleeved shirt and long pants
- Waterproof gloves
- Shoes plus socks
- Protective eyewear

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

**USER SAFETY RECOMMENDATIONS**

Users should:

- wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

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### AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

**Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.**

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls,
- Chemical-resistant gloves, such as Barrier Laminate or Nitrile Rubber or Neoprene Rubber or Viton, and
- Shoes plus socks.

### ENVIRONMENTAL HAZARDS

This pesticide is extremely toxic to fish and aquatic invertebrates. Use with care when applying in areas adjacent to any body of water. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not make applications when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

The use of bifenthrin is prohibited in areas that may result in exposure of endangered species to bifenthrin. Prior to use in a particular county contact the local extension service for procedures and precautions to use to protect endangered species.

### DIRECTIONS FOR USE

**IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING.**

Do not apply this product through any type of irrigation system.

Bifenture 17 is an insecticide formulated as a suspension concentrate containing 1.5 lbs active ingredient per gallon of bifenthrin. Bifenture 17 can be mixed with liquid fertilizers or water. Shake well prior to mixing or measuring Bifenture 17 for use.

### RESISTANCE

Any insect/mite population may contain individual insects that may develop resistance to a specific pesticide product used in consecutive generations to control these pests. Prediction of resistance development is uncertain. Follow appropriate resistance management strategies. Contact your local extension specialist or certified crop advisors for any additional pesticide resistance management and/or Integrated Pest Management recommendations for the specific site and pest problems in your area.

If resistance to this product develops in your area, you may find reduced control from this product or other products with a similar mode of action. If poor performance cannot be related to improper application methods or extreme weather, it is possible that a resistant strain of insect may be present. If poor control occurs and

resistance is a reasonable cause, immediately consult with your local UPI representative or agricultural advisor for the best alternative method of control for your area.

### INSTRUCTIONS FOR APPLICATION

The rate at which Bifenture 17 is applied may vary due to insect pressure, timing of treatments and field scouting. Use the lower rate when pest infestation is considered light to moderate. Use the higher rate when there is heavy pest pressure. Application rates are higher when the climate is drier.

The spray tank should be filled  $\frac{1}{2}$  full with liquid fertilizer or water and then agitated continuously. Next add the appropriate amount of Bifenture 17, and then add the remaining amount of the fertilizer or water to the tank. Agitation should be maintained until the mixture has been applied.

**SHAKE WELL BEFORE USING.**

Bifenture 17 spray solutions in nurse tanks must be agitated before transferring to the spray system.

This product can be applied in-furrow with the seed, either as a broadcast application, a band over the open furrow (T-Band), over the row, or as a transplant-water drench during setting. For more instruction on suppression or pest control, refer to the information contained in the tables on this label.

Bifenture 17 can be mixed with a number of frequently used liquid starter or pop-up fertilizers. Follow liquid fertilizer recommendations regarding seed safety and use guidelines. A jar test should be used prior to application of any fertilizer with Bifenture 17. Ensure the applicable amount of Bifenture 17 and fertilizer are used in this compatibility test. The tank mixture should not be allowed to sit overnight. If the tank mixture does sit overnight, the tank mixture should be agitated to ensure proper mixing before application.

### USE RESTRICTIONS

New York State: Do not apply Bifenture 17 using ground equipment within 100 feet of coastal marshes or streams that drain into coastal marshes.

Cultivation within 10 feet of a water body is prohibited to allow for the growth of a vegetated filter strip.

Do not mix or allow any contact with oxidizing agents since hazardous chemical reaction may occur.

### CROP ROTATION RESTRICTIONS

Crops for which bifenthrin tolerances exist may be rotated at any time. All other crops may be rotated 30 days after the last application.

### TANK-MIXES

Apply Bifenture 17 with other EPA Registered products that are registered for the same crops. Read and follow all applicable directions, restrictions and precautions on the tank mix partners' EPA registered label. Test for compatibility to ensure application success.

### MAXIMUM ALLOWABLE BIFENTURE 17 USE PER ACRE PER SEASON

For the maximum allowable usage per acre per season refer to the tables below for each crop. The maximum allowable use must include all registered use patterns including at-plant, soil applied and/or foliar applications for the 12 months period. The 12 month period is to begin upon the initial application to the acre.

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## BUFFER ZONES

### Vegetative Buffer Strip

Construct and maintain a minimum 10-foot-wide vegetative filter strip of grass or other permanent vegetation between the field edge and down gradient aquatic habitat (such as, but not limited to, lakes; reservoirs; rivers; permanent streams; marshes or natural ponds; estuaries; and commercial fish farm ponds).

Only apply products containing bifenthrin onto fields where a maintained vegetative buffer strip of at least 10 feet exists between the field and down gradient aquatic habitat.

For guidance, refer to the following publication for information on constructing and maintaining effective buffers: Conservation Buffers to Reduce Pesticide Losses. Natural Resources Conservation Services. USDA, NRCS. 2000. Fort Worth, Texas. 21pp. <http://www.in.nrcs.usda.gov/technical/agronomy/newconbuf.pdf>.

### Buffer Zone for Ground Application (groundboom, overhead chemigation, or airblast)

Do not apply within 25 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

### Buffer Zone for ULV Aerial Application

Do not apply within 450 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

### Buffer Zone for Non-ULV Aerial Application

Do not apply within 150 feet of aquatic habitats (such as, but not limited to, lakes, reservoirs, rivers, streams, marshes, natural ponds, estuaries, and commercial fish ponds).

## SPRAY DRIFT REQUIREMENTS

### Wind Direction and Speed

Only apply this product if the wind direction favors on-target deposition. Do not apply when the wind velocity exceeds 15 mph.

### Temperature Inversion

Do not make aerial or ground applications into temperature inversions. Inversions are characterized by stable air and increasing temperatures with height above the ground. Mist or fog may indicate the presence of an inversion in humid areas. The applicator may detect the presence of an inversion by producing smoke and observing a smoke layer near the ground surface.

### Droplet Size

Use only medium or coarser spray nozzles (for ground and non-ULV aerial application) according to ASAE (S572) definition for standard nozzles. In conditions of low humidity and high temperatures, applicators should use a coarser droplet size.

### Additional Requirements for Ground Applications

Wind speed must be measured adjacent to the application site on the upwind side, immediately prior to application.

For ground boom applications, apply using a nozzle height of no more than 4 feet above the ground or crop canopy.

For airblast applications, turn off outward pointing nozzles at row ends and when spraying the outer two rows. To minimize spray loss over the top in orchard applications, spray must be directed into the canopy.

### Additional Requirements for Aerial Applications

The spray boom should be mounted on the aircraft as to minimize drift caused by wingtip or rotor vortices. The minimum practical boom length should be used and must not exceed 75% of the wing span or 80% rotor diameter.

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Flight speed and nozzle orientation must be considered in determining droplet size.

Spray must be released at the lowest height consistent with pest control and flight safety. Do not release spray at a height greater than 10-feet above the crop canopy unless a greater height is required for aircraft safety.

When applications are made with a cross-wind, the swath will be displaced downwind. The applicator must compensate for this displacement at the downwind edge of the application area by adjusting the path of the aircraft upwind.

**BRASSICAS**

CROP	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Head and Stem Brassica Vegetables including: Broccoli Brussels Sprout Cabbage Cauliflower Cavalo Broccoli Chinese Broccoli (gailon, white flowering broccoli) Chinese Cabbage (napa) Chinese Mustard Cabbage (gai choy) Kohlrabi	Rootworm larvae	6.8 - 8.5 fl.oz	0.39 - 0.49 fl. oz.	Apply as a 5-7 inch band (T-band) over open seed furrow or in-furrow with the seed.
	0.08 - 0.1 lbs ai/ A			
	Grubs Cabbage maggot Root maggots	3.4 - 6.8 fl. oz	0.2 - 0.39 fl. oz.	Apply broadcast treatment over the soil surface for control of Armyworm and Cutworm spp..
	Root aphids Seedcorn maggot Wireworm	0.04-0.08 lbs. ai/A		
	Army cutworm Armyworm spp.	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	Cutworm spp.	0.04 - 0.08 lbs ai/A		
<b>RESTRICTIONS</b> Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application. Do not apply more than 0.5 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.				

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**BUSHBERRIES (FOLIAR)**

CROP	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Blueberry, highbush and low bush Currant Elderberry Gooseberry Huckleberry	Blueberry maggot Fruitworms Lecanium scale (crawlers)	3.4 – 8.5 fl. oz.	Apply Bifenture 17 in a minimum of 2 gallons of finished spray per acre or in a minimum of 10 gallons of finished spray per acre. Thorough coverage is required for control of listed pests.
	Plum curcuho Obliquebanded leaf roller Red banded leafroller Variegated leafroller Spanworm Leafhoppers Aphids	0.04-0.10 lbs. ai/A	
	Banks Grass Mite Twospotted Spider Mite	6.8- 8.5 fl. oz.	
Carmine Mite Pacific Spider Mite Lygus Spp	0.08- 0.10 lbs ai/A		
<b>RESTRICTIONS</b> Do not apply more than 0.5 lbs. ai per acre per season. Do not make applications less than 7 days apart. Do not apply within 1 day of harvest.			

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**CILANTRO, CORIANDER**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17/ 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Armyworm spp. Cutworm spp. Flea beetle larvae Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply as a 5 - 7 inch band over the row on the soil surface, a 5 -7 inch band over the open furrow (T-band) in-furrow with the seed, or broadcast to the soil surface.
	0.04 - 0.08 lbs. ai/A		
<b>RESTRICTIONS</b> Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application. Do not apply more than 0.5 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.			

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**CITRUS**  
**(BARE SOIL SURFACE UNDER DRIP LINE)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Asian cockroach ( <i>Blattella asahinae</i> ) Fire ants ( <i>Solenopsis spp.</i> )	8.5 - 21.25 fl. oz. 0.1-0.25 lbs. ai/A	Apply by ground in a minimum of 40 gallons of dilute spray per acre. Make uniform application to bare soil beneath the tree from the trunk to the drip line of the tree. Use a higher spray volume to ensure uniformity of coverage. Pre- and post-application irrigation may also aid in uniform coverage.
Blue Green Citrus Root Weevil ( <i>Pachnaeus opalus</i> ) Brown Leaf Notcher ( <i>Epicaerus mexicanus</i> ) Diaprepes Root Weevil ( <i>Diaprepes abbreviatus</i> ) Little Leaf Notcher ( <i>Artipus floridanus</i> ) Southern Blue Green Citrus Root Weevil ( <i>Pachnaeus litus</i> )	21.25 - 42.5 fl. oz. 0.25 - 0.50 lbs. ai/A	<p>Bifenture protects tree roots from root weevils by forming a barrier of pesticide through which they must burrow when the newly hatched neonates fall from the tree. After application minimize disturbance of the soil beneath the trees to maintain this barrier.</p> <p>It is important to time applications correctly. Peak emergence of adult Diaprepes Weevil varies by citrus growing region and is also dramatically affected by environmental factors such as soil moisture. Typically, two peaks are observed for Diaprepes, first in spring and then in late summer or early fall. For Southern Blue Green and Blue Green Citrus Weevils and Fuller Rose Beetle, a single emergence peak in the spring is typical. Brown and Little Leaf Notchers typically have three emergence peaks in spring, summer, and fall.</p> <p>Since emergence varies seasonally and by location, observation of adults is the most accurate way to forecast timing of applications. Numbers of adults can be estimated by trapping during spring and summer during the active early morning and later afternoon periods. Egg laying occurs for 8-10 weeks following emergence from the soil, and larval invasion of the soil begins 2-3 weeks following adult emergence. It is critical to have the Bifenture 17 soil barrier in place before the neonates drop.</p> <p>Use Bifenture 17 in conjunction with other tools in an integrated pest management program for Citrus Root Weevils. Good cultural practices, biological control of larvae and foliar control of adults are all important. Local university extension personnel can provide the most current information to protect citrus trees.</p> <p><b>Addition information:</b> Apply to individual citrus resets, when not in solid planted rows, using hand-gun or shielded sprayer.</p> <p>Note that although peak emergence of Diaprepes occurs in the spring, weather conditions can lead to emergence of this pest in the fall.</p> <p>Use the highest rate (42.5 fl. oz.) to obtain the longest residual management of Diaprepes root weevil. If the citrus grove to be treated is in an area where weather conditions will promote more than one peak of pest emergence, make a initial application of 21.25 fl. oz. early season and second application of 21.25 fl. oz. later in the season.</p>
<p><b>RESTRICTIONS</b> Do not apply Bifenture 17 through irrigation systems. Do not allow Bifenture 17 to contact fruit or foliage. Do not apply more than a total of 42.5 fl. oz. of formulated product (0.5 lbs. ai) per acre per year. Do not apply by air.</p>		

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**Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed, Sweet Corn, Sweet Corn Grown for Seed**  
 (At Planting Use)

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Corn Rootworm, larvae (Northern, Southern and Western)	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch T-band at planting over the open seed furrow, or in-furrow with the seed.  To control Army Cutworm, Stalkborer, Cutworm spp., True Armyworm or Armyworm spp.: apply as a 5 to 7 inch over open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.
	0.08 - 0.1 lbs. ai/A		
Grape colapsis Grubs Seedcorn maggot Root aphids Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
Army cutworm Cutworm spp. True armyworm Armyworm spp. Stalkborer	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
<b>RESTRICTIONS</b>			
Do not apply more than 0.1 lbs. ai per acre per season.			
Do not apply to soil where there is greater than 30% cover of crop residue remaining.			
For field corn - Do not apply more than 0.3 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.			
For sweet corn - Do not apply more than 0.2 lbs. ai per acre total per season including pre, ppi, at-plant and foliar applications of other products containing bifenthrin.			

**Field Corn (Grain and Silage), Popcorn, Field Corn Grown for Seed, Sweet Corn, Sweet Corn Grown for Seed**  
**(Pre-Plant Incorporated (PPI) and Pre-Emergence (PRE))**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Armyworm spp. Black Cutworm Grape colapsis Seedcorn Maggot White Grub Wireworm	4 - 5.3 fl. oz. 0.047- 0.062 lbs. ai./A (PPI)	Incorporate Bifenture 17 close to the anticipated depth of the seed, but do not exceed 3 inches in depth. PPI: Use the 4 - 5.3 fl. oz/A (0.047-0.062 lbs ai/A) rate only. Apply alone or with PPI herbicides as a tank mix. PRE: Use the 3.4 fl. oz/A (0.04 lbs ai/A) rate when tank mixing and applying with PRE herbicides.
Armyworm spp. Black Cutworm Stalkborer	3.4 fl. oz. 0.04 lbs. ai./A (PRE)	
<b>RESTRICTIONS</b> For field corn - Do not apply more than 0.3 lbs. ai per acre total per season including pre, ppi, at-plant and foliar applications of other products containing bifenthrin. For sweet corn - Do not apply more than 0.2 lbs. ai per acre total per season including pre, ppi, at-plant and foliar applications of other products containing bifenthrin.		

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**CUCURBITS**

CROP	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Chayote (fruit) Chinese waxgourd (Chinese preserving melon) Citron melon Cucumber Gherkin Gourd, edible <i>Lagenaria</i> spp. (includes hyotan, cucuzza), <i>Luffa</i> spp. (includes hechima, Chinese okra) <i>Momordica</i> spp. (includes balsam apple, balsam pear, bitter melon, Chinese cucumber) Muskmelon (hybrids and/or cultivars of <i>Cucumis melo</i> ) (includes true cantaloupe, cantaloupe, casaba, crenshaw melon, golden pershaw melon, honeydew melon, honey balls, mango melon, Persian melon, pineapple melon, Santa Claus melon, and snake melon) Pumpkin ( <i>Cucurbita</i> spp.) Squash, summer (includes crookneck squash, scallop squash, straightneck squash, vegetable marrow, zucchini) Squash, winter (includes butternut squash, calabaza, hubbard squash ( <i>C. mixta</i> ; <i>C. pepo</i> ) includes acorn squash, spaghetti squash) Watermelon (includes hybrids and/or varieties of <i>Citrullus</i> spp.).	Cucumber beetle larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	For control of rootworm larvae: apply as a 5 to 7 inch band over an open furrow (T-band), or in-furrow with the seed.
		0.08 - 0.1 lbs. ai/A		For control of wireworm, grubs, and flea beetle larvae: apply as a 5 to 7 inch band over an open furrow (T-band), or in-furrow with the seed or transplant.
	Flea beetle larvae	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	For control of army cutworm, cutworm spp, true armyworm and armyworm spp.; apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), in-furrow with the seed, broadcast to the soil surface or banded over the row.
	Grubs Wireworm		0.04 - 0.08 lbs. ai/A	
	Army cutworm Armyworm spp. Cutworm spp.	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	True armyworm		0.04 - 0.08 lbs. ai/A	
<p><b>RESTRICTIONS</b></p> <p>Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.</p> <p>Do not apply more than 0.3 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.</p>				

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**BEANS AND PEAS, DRIED**

CROP	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Dried cultivars of:	Corn rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, 5 to 7 inch band (T-band) over an open furrow, or in-furrow with the seed.
Bean (Lupinus)		0.08 - 0.1 lbs. ai/A		
Bean (Phaseolus)	Grape colapsis Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast to the soil surface for control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.
Field bean	Grubs	0.04 - 0.08 lbs. ai/A		
Kidney bean	Root maggot	0.04 - 0.08 lbs. ai/A		
Lima bean (dry)	Army cutworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
Navy bean	Cutworm spp.	0.04 - 0.08 lbs. ai/A		
Pinto bean	True armyworm	0.04 - 0.08 lbs. ai/A		
Tepary bean	Armyworm spp	0.04 - 0.08 lbs. ai/A		
Bean (Vigna)				
Adzuki bean	<b>RESTRICTIONS</b>			
Blackeyed pea	Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.			
Catjang	Do not apply more than 0.2 lbs. ai to peas, or 0.3 lbs. to beans per acre per season including at-plant plus foliar applications of other bifenthrin products.			
Cowpea				
Crowder pea				
Moth bean				
Mung bean				
Rice bean				
Southern pea				
Urd bean				
Broad bean (dry)				
Chickpea				
Guar				
Lablab bean				
Lentil				
Pea (Piscum)				
Field pea				
Pigeon pea				

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**BEANS AND PEAS, SUCCULENT**

CROPS	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 / 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Pea ( <i>Pisum</i> spp.) Dwarf pea Edible-pod pea English pea Garden pea Green pea Snow pea	Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
Sugar snap pea Pigeon pea Bean ( <i>Phaseolus</i> spp.) Broadbean (succulent) Lima bean (green)	Grape colapsis Grubs Root maggot Seedcorn maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
Runner bean Snap bean Wax bean Bean ( <i>Vigna</i> spp.) Asparagus bean Blackeyed pea, Chinese longbean, Cowpea Moth bean Southern pea Yardlong bean, Jackbean Soybean (immature seed) Sword bean	Army cutworm Armyworm spp. Cutworm spp. True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast over the soil surface for control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.
<b>Restrictions</b>		0.04 - 0.08 lbs. ai/A		
Do not apply more than 0.1 lbs ai per acre per season as an at-plant application.		0.04 - 0.08 lbs. ai/A		Do not apply more than 0.2 lbs ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.

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**EGGPLANT**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl.oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lbs. ai/A		
Grubs Root maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl.oz.	Apply broadcast to the soil surface for control of Army Cutworm, Cutworm Species, True Armyworm or Armyworm species.
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Cutworm spp. True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl.oz.	
	0.04 - 0.08 lbs. ai/A		
<b>RESTRICTIONS</b>			
Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.			
Do not apply more than 0.2 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.			

**LETTUCE, HEAD**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lbs. ai/A		
Grubs Lettuce root aphid Root maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast to the soil surface for control of Army cutworm, Cutworm spp., True armyworm, armyworm spp. or bulb mites.
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Bulb mites Cutworm spp. True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
<b>RESTRICTIONS</b>			
Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.			
Do not apply more than 0.5 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.			

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**LEAFY BRASSICAS, TURNIP GREENS**

CROPS	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Broccoli Raab Bok Choy Collards Kale	Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (Tband), or in-furrow with the seed.
Mizuna Mustard Greens Mustard Spinach Rape Greens Turnip Greens	Grubs Lettuce root aphid Root maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
			0.08 - 0.1 lbs. ai/A	
			0.04 - 0.08 lbs. ai/A	
			0.2 - 0.39 fl. oz.	Apply broadcast over the soil surface for control of Army cutworm, Cutworm spp., True armyworm or armyworm spp.
			0.04 - 0.08 lbs. ai/A	
<b>RESTRICTIONS</b>				
Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.				
Do not apply more than 0.4 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.				

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**LEAFY PETIOLE VEGETABLES (FOLIAR)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Cutworms Corn Earworm Tobacco Budworm Saltmarsh Caterpillar Leafhoppers Flea Beetles Imported Cabbageworm Cucumber Beetles Aphids Whitefly Armyworms Loopers Stink Bugs Crickets Ground Beetles Thrips Wireworm (adults) Diamondback Moth	3.4 – 8.5 fl. oz.  0.04 – 0.1 lbs. ai/A	Apply in a minimum of 2 gallons of finished spray per acre by air or in a minimum of 10 gallons of finished spray per acre with ground equipment. When applying by air, 1-2 quarts of emulsified oil may be used instead of water in the finished spray. To ensure effective control, thorough coverage is required.
Banks Grass Mite	6.8 – 8.5 fl. oz.	
Twospotted Spider Mite Carmine Mite Pacific Spider Mite Lygus Spp.	0.08 – 0.10 lbs. ai/A	
<b>RESTRICTIONS</b> Do not apply more than 0.5 lbs. ai per acre per season. Do not make applications less than 7 days apart. Do not apply within 7 days of harvest.		

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OKRA

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Armyworm Cutworm Flea beetle larvae	3.4 - 6.8 fl. oz.	0.2-0.39 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), in-furrow with the seed, or broadcast to the soil surface.
Wireworm	0.04 - 0.08 lbs. ai/A		

**RESTRICTIONS**  
 Do not apply more than 0.1 lbs per acre per season as an at-plant application.  
 Do not apply more than 0.2 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.

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**PEPPERS (BELL and NON-BELL)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FOOT	APPLICATION INSTRUCTIONS
Rootworm Larvae	6.8- 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lbs. ai/A		
Grubs Flea beetle larvae Pepper maggot Root aphid Root maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast over the soil surface for control of Army cutworm, Cutworm spp., True armyworm, Armyworm spp. or Stalk borer
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Cutworm spp. Stalk borer True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
<p><b>RESTRICTIONS</b>                  Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.                  Do not apply more than 0.2 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.</p>			

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**SOD FARMS (FOLIAR)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17/1,000 Sq. ft.	APPLICATION INSTRUCTIONS
Armyworms <sup>1</sup> Cutworms <sup>1</sup> Sod Webworm <sup>1</sup>	2.8 - 4.35 fl. oz.	0.066 - 0.1 fl. oz.	Apply as a broadcast treatment. Use higher volumes up to 10 gallons of carrier per 1,000 sq. ft. to get uniform coverage when treating dense grass foliage.
Annual Bluegrass Weevil ( <i>Hyperodes</i> ) (Adult) <sup>2</sup> Banks Grass Mite <sup>6</sup> Billbugs (Adult) <sup>3</sup> Black Turfgrass Ataenius (Adult) <sup>4</sup> Crickets Earwigs Fleas (Adult) Grasshoppers Mealybugs Mites <sup>6</sup>	4.35 - 8.7 fl. oz.	0.1 - 0.2 fl. oz.	Irrigation to treated area within a few hours following application can improve efficacy to sub-surface pests including mole crickets. The application rate ranges will provide excellent control of the named pests under typical conditions. However if maximum residual control is desired or heavy pest populations occur, Bifenture 17 may be applied at up to 0.4 fl. oz./1,000 sq. ft rate.
Ants Chinch Bugs <sup>5</sup> Fleas (Larvae) <sup>7</sup> Imported Fire Ants <sup>8</sup> Japanese Beetle (Adult) Mole Cricket (Adult) <sup>9</sup> Mole Cricket (Nymph) <sup>10</sup> Ticks <sup>11</sup>	8.7 - 17.42 fl. oz.	0.2 - 0.4 fl. oz.	
<p><b>RESTRICTIONS</b></p> <p>In New York State, this product may NOT be applied to any grass or turf area within 100 feet of a water body (lake, pond, river, stream, wetland, or drainage ditch).</p> <p>In New York State, make a single repeat application of this product if there are signs of renewed insect activity, but not sooner than two weeks after the first application.</p>			

<sup>1</sup>**Armyworms, Cutworms and Sod Webworms:** For best control, delay watering (irrigation) or mowing for 24 hours after application. Higher application rates (up to 0.4 fl. oz. per 1000 sq. ft) may be required if the grass area is being maintained at a mowing height of greater than 1" in periods of high pest pressure.

<sup>2</sup>**Annual Bluegrass Weevil (*Hyperodes*) adults:** Time applications to control adult weevils as they leave their overwintering sites and move into grass areas. Generally, this movement begins when *Forsythia* is in full bloom and finish when flowering dogwood is in full bloom. Your State Cooperative Extension Service can give more specific information regarding the timing of applications.

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**<sup>3</sup>Billbug adults:** Apply when adult billbugs are first seen during April and May. Consult degree day models to optimize application timing, and consult your State Cooperative Extension Service for information specific to your region. In temperate regions, apply in spring to also provide control of over-wintered chinch bugs.

**<sup>4</sup>Black Turfgrass Ataenius adults:** Apply during May and July to control the first and second generations, respectively. Time the May application to coincide with the full bloom stage of Vanhoutte spiraea (*Spirea vanhouttei*) and horse chestnut (*Aesculus hippocastanum*). Time the July application to coincide with the blooming of Rose of Sharon (*Hibiscus syriacus*).

**<sup>5</sup>Chinch Bugs:** Chinch Bugs infest the base of grass plants and are often found in the thatch layer. Irrigation of the grass area before treatment will optimize the penetration of the insecticide to the area where the chinch bugs are located. Use higher volume applications if the thatch layer is excessive or if a relatively long mowing height is being maintained. Chinch Bugs can be one of the most difficult pests to control in grasses and the higher application rates (up to 0.4 fluid oz. per 1000 square feet) may be required to control populations that contain both nymphs and adults during the middle of the summer.

**<sup>6</sup>Mites:** For best control of eriophyid mites, apply in combination with the labeled application rate of a surfactant. A second application timed five to seven days after the first may be necessary for acceptable control.

**<sup>7</sup>Flea larvae:** These pests develop in the soil of shaded areas accessible to pets and other animals. When treating these areas, use a higher volume application to ensure the insecticide penetrates into the soil. Note: if the lawn area is being treated with this product at 0.1 fl. oz/ 1,000 square feet for adult flea control, then the larval application rate may be achieved by increasing the application volume two- to four-fold.

**<sup>8</sup>Imported Fire Ants:** For best control, combine broadcast applications (to control foraging workers and newly mated fly-in queens) with mound drenches (to control existing colonies). If the soil is not moist, irrigate before application or use a high volume application. For broadcast treatments use 0.4 fl. oz./1,000 sq. ft. Treat mounds by diluting 0.05 fl. oz of Bifenture 17 per gallon of water and applying 1 to 2 gallons of finished spray per mound. Treat mounds with sufficient force to break their apex and allow the insecticide solution to flow into the ant tunnels. A four foot diameter circle around the mound should also be treated. For best results, apply in cool weather (65 - 80°F) or in early morning or late evening hours.

**<sup>9</sup>Mole Cricket adults:** Adult mole crickets are difficult to control because preferred grass areas are continuously invaded during the early spring. Apply as late in the day as possible, and water in with up to 0.5 inches of water immediately after treatment. If the soil is not moist, irrigate before application to bring the mole crickets closer to the soil surface and maximize exposure to the insecticide. Grass areas that receive pressure from adult mole crickets should be treated at peak egg hatch to ensure optimum control of subsequent nymph populations (see below).

**<sup>10</sup>Mole Cricket nymphs:** In grass areas that receive intense pressure from adult mole crickets, treat immediately before peak egg hatch. Best control is achieved at that time because young nymphs are more susceptible to insecticides and they are located near the soil surface. To control larger, more damaging, nymphs later in the year a higher application rate and more frequent applications may be necessary. Apply as late in the day as possible and water in with up to 0.5 inches of water immediately following treatment. If the soil is not moist, irrigate before application to bring the crickets closer to the soil surface and maximize exposure to the insecticide.

**<sup>11</sup>Ticks (Including ticks that may transmit Lyme Disease and Rocky Mountain Spotted fever):** Do not make spot applications, but treat the entire area where exposure to ticks may occur. When treating areas with dense ground cover or heavy leaf litter, use higher spray volumes. Note that ticks may be reintroduced from surrounding areas on host animals and retreatment may be necessary to achieve and/or maintain control during periods of high pest pressure. Limit repeat application to no more than once per seven days, and only if there are signs of renewed activity.

**Deer ticks (*Ixodes sp.*)** This pest has a complex life cycle that ranges over a two year period and involves four life stages. Apply in the late fall and/or early spring to control adult ticks (usually located on brush or grass above the soil surface) and in mid to late spring to control larvae and nymphs (found in the soil and leaf litter).

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**American dog ticks.** These ticks commonly congregate along paths or roadways where humans are likely to be encountered. Apply as necessary from mid-spring to early fall to control larvae, nymphs and adults.

**SOYBEANS**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17/ 1,000 Linear ft.	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08-0.1 lbs. ai/A		
Grape colapsis Grubs Root maggot Seedcorn maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast over the soil surface for control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Cutworm spp. True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
<p><b>RESTRICTIONS</b></p> <p>Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application.</p> <p>Do not apply more than 0.2 lbs. ai per acre per season including at-plant plus foliar applications of other bifenthrin products.</p>			

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**SOYBEANS**

**(Pre-Plant Incorporated (PPI) and Pre-Emergence (PRE))**

<b>PESTS CONTROLLED</b>	<b>RATE BIFENTURE 17/ACRE RATE</b>	<b>APPLICATION INSTRUCTIONS</b>
Armyworm spp. Black Cutworm Seedcorn Maggot White Grub Wireworm	4 - 5.3 fl. oz. 0.047 - 0.062 lbs. ai/A (PPI)	Incorporate Bifenture 17 incorporated close to the anticipated depth of the seed, but do not exceed 3 inches in depth.  PPI: Use the 4 - 5.3 fl. oz/A (0.047 - 0.062 lbs. ai/A) rate only. Bifenture 17 can be tank mixed and applied with PPI herbicides.
Armyworm spp. Black Cutworm Stalkborer	3.4 fl. oz. 0.04 lbs. ai/A (PRE)	PRE: Use the 3.4 fl. oz/A (0.04 lbs. ai/A) rate when mixing and apply with PRE herbicides.
<p><b>RESTRICTIONS</b></p> <p>Do not apply more than 0.1 lbs ai (8.5 fl. oz.) per acre per season as PPI or PRE application.</p> <p>Do not apply more than 0.2 lbs ai (17.0 fl. oz.) per acre per season including at-plant plus foliar applications of other bifenthrin products.</p>		

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**SPINACH**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17/1,000 Linear ft.	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl. oz.	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lbs. ai/A		
Grubs Root maggot Seedcorn maggot Wireworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	• • •
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Cutworm spp. True armyworm	3.4 - 6.8 fl. oz.	0.2 - 0.39 fl. oz.	Apply broadcast to the soil surface for control of Army cutworm, Cutworm spp., True armyworm, or Armyworm spp.
	0.04 - 0.08 lbs. ai/A		
<p><b>RESTRICTIONS</b></p> <p>Do not apply more than 0.1 lbs ai per acre per season as an at-plant application.</p> <p>Do not apply more than 0.4 lbs ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.</p>			

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**TOBACCO (PRE-TRANSPLANT and AT-TRANSPLANT)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17/1,000 LINEAR FT.	APPLICATION INSTRUCTIONS
Armyworm spp. Cutworm spp. Flea beetle larvae Mole cricket Stalkborer White grubs Wireworm	3.4 - 8.5 fl. oz.	0.2 - 0.49 fl. oz.	<p><b>Pre-transplant soil applications:</b>            To control below ground pests, use equipment which will incorporate the application into top 4" of the soil.</p> <p><b>At-transplant water treatment application:</b>            Apply 0.0625 to 0.1 lbs. ai/A in a water treatment application volume of 10 - 200 gal/A.</p> <p>May be tank mixed with herbicides registered for tobacco use. Always check for compatibility before applying tank-mixes with Bifenture 17. Always check the labels when mixing with herbicides to avoid crop damage issues.</p>
	0.04 - 0.1 lbs. ai/A		
<p><b>RESTRICTIONS</b></p> <p>Do not apply more than 0.2 lbs. ai per acre per season.</p> <p>Do not apply later than layby.</p>			

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**TOBACCO (FOLIAR)**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Aphid spp.* Armyworm spp. Chinch Bugs Cutworm spp. Flea Beetle (Adults) Grasshoppers Green Bugs Japanese Beetles Stink Bugs Tarnished plant bugs Thrips Whiteflies	3.4 - 8.5 fl. oz. 0.04 - 0.1 lbs. ai./A	Apply 0.04 to 0.10 lbs ai/A per foliar application up to, and including, layby in a minimum of 10 gal/A.  <b>*Aphids - See Resistance Management section of this label.</b>
Budworm Hornworm Tobacco	6.8 - 8.5 fl. oz. 0.08 - 0.1 lbs. ai./A	
Lygus spp Spider mites	8.5 fl. oz. 0.1 lbs. ai.A	
<b>RESTRICTIONS</b> Do not make more than 2 foliar applications per season. Do not apply more than 0.2 lbs. ai per acre (17.0 fl. oz/A) per season. Do not apply later than layby. May be tank mixed with herbicides registered for tobacco use. Always check for compatibility before applying tank-mixes with Bifenture 17. Always check the labels when mixing with herbicides to avoid crop damage issues.		

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**TOMATOES**

PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	RATE BIFENTURE 17 PER 1,000 LINEAR FT.	APPLICATION INSTRUCTIONS
Rootworm larvae	6.8 - 8.5 fl. oz	0.39 - 0.49 fl. oz.	Apply as a 5 to 7 inch band over the row on the soil surface, a 5 to 7 inch band over the open furrow (T-band), or in-furrow with the seed.
	0.08 - 0.1 lbs. ai/A		
Flea beetle larvae Grubs Root maggot Wireworm	3.4 - 6.8 fl. oz	0.2 - 0.39 fl. oz.	
	0.04 - 0.08 lbs. ai/A		
Army cutworm Armyworm spp. Cutworm spp. True armyworm Stalkborer	3.4 - 6.8 fl. oz	0.2 - 0.39 fl. oz.	Apply broadcast to the soil surface for control of Army cutworm, Cutworm spp., True armyworm, Armyworm spp. or Stalkborer.
	0.04 - 0.08 lbs. ai/A		
<b>RESTRICTIONS</b> Do not apply more than 0.1 lbs. ai per acre per season as an at-plant application. Do not apply more than 0.32 lbs. ai per acre per season including at-plant plus foliar applications of other products containing bifenthrin.			

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**TUBEROUS AND CORM VEGETABLES (AT-PLANT)**

CROPS	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Potato Sweet potato Arracacha Arrowroot Chinese artichoke Jerusalem artichoke Edible canna	Grape colapsis Rootworms Sweet potato flea beetle White grub Wireworms	12.75 - 25.5 fl. oz.  0.15 - 0.3 lbs. ai/A	Apply as a soil incorporated broadcast, directed bed spray or a T-band spray into the planting furrow for the control of wireworms, rootworms, sweet potato flea beetle and white grubs.  Apply in a minimum of 10 gallons per acre of spray at the rate of 0.15 to 0.3 lbs ai (12.75 - 25.5 fl oz of product) per acre.
Cassava (bitter and sweet) Chayote (root) Chufa Dasheen (taro) Ginger Leren Tanier Turner Yam bean True yam	<b>RESTRICTIONS</b> Do not apply more than 0.3 lbs ai (25.5 fl. oz/A) per acre per season as an at-plant application. Do not apply more than 0.5 lbs ai (42.5 fl. oz./A) per acre per season including at-plant plus foliar applications of other products containing bifenthrin.		

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**TUBEROUS AND CORM VEGETABLES (LAY-BY)**

CROPS	PESTS CONTROLLED	RATE BIFENTURE 17/ACRE	APPLICATION INSTRUCTIONS
Potato Sweet potato Arracacha Arrowroot Chinese artichoke Jerusalem artichoke Edible canna Cassava (bitter and sweet)	Grape colapsis Rootworms White grub Wireworms	12.75 - 25.5 fl. oz. 0.15 - 0.3 lbs. ai/A	Apply Bifenture 17 as one or more soil directed and incorporated treatments at cultivation or lay-by for the control of wireworms, rootworms and white grubs. Apply to the drill area and incorporate by cultivation equipment set to throw soil towards the drill area. Apply Bifenture 17 in a minimum of 10 gallons per acre of spray at a rate of 0.15 to 0.3 lbs. ai (12.75 to 25.5 fl. oz. of product) per acre.
Chayote (root) Chufa Dasheen (taro), Ginger Leren Tanier, Turmer Yam bean True yam	<b>RESTRICTIONS</b> Do not apply more than 0.5 lbs ai (42.5 fl.oz./A) per acre per season including soil plus foliar applications of other products containing bifenthrin.		

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## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

### **Pesticide Storage**

If storing this product below freezing, user should shake or roll the container to ensure proper product consistency.

Keep out of reach of children and animals. Store in original containers only. Store in a cool, dry place and avoid excess heat. Carefully open containers. After partial use, replace lids and close tightly. Do not put concentrate or dilute material into food or drink containers. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

In case of spill, avoid contact, isolate area and keep out animals and unprotected persons. Confine spills. Call **CHEMTREC (Transportation and Spills): (800) 424-9300**.

To confine spill: If liquid, dike surrounding area or absorb with sand, cat litter or commercial clay. If dry material, cover to prevent dispersal. Place damaged package in a holding container. Identify contents.

**Pesticide Disposal:** Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative of the nearest EPA Regional Office for guidance.

**Container Handling: Non-refillable container (in sizes 5 gallons or less).** Do not reuse or refill this container. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds, pour rinsate into application equipment or mix tank or store rinsate for later use or disposal. Drain for 10 seconds after flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available, or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities.

**Non-refillable container (in sizes greater than 5 gallons) -** Do not reuse or refill this container. Triple rinse or pressure rinse. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

**Refillable container:** Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

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**IMPORTANT INFORMATION  
READ BEFORE USING PRODUCT  
CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

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